

PATENT COOPERATION TREATY



PCT 10/527506

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference 40020430-02 | FOR FURTHER ACTION See Form PCT/IPEA/416 | |
| International application No. PCT/JP2003/011762 | International filing date (day/month/year) 16 September 2003 (16.09.2003) | Priority date (day/month/year) 20 September 2002 (20.09.2002) |
| International Patent Classification (IPC) or national classification and IPC G11B 5/00, 5/455, 5/596, 5/84, 21/10, 21/21 | | |
| Applicant AGILENT TECHNOLOGIES JAPAN,LTD. | | |

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. (*sent to the applicant and to the International Bureau*) a total of 2 sheets, as follows:

sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

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|---|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> Box No. VIII | Certain observations on the international application |

| | |
|--|---|
| Date of submission of the demand 21 October 2004 (21.10.2004) | Date of completion of this report 06 April 2005 (06.04.2005) |
| Name and mailing address of the IPEA/JP | Authorized officer |
| Facsimile No. | Telephone No. |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/011762

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:

- international search (under Rules 12.3 and 23.1(b))
- publication of the international application (under Rule 12.4)
- international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

The international application as originally filed/furnished
 the description:

pages _____ 1-18 _____, as originally filed/furnished
 pages* _____ received by this Authority on _____
 pages* _____ received by this Authority on _____

the claims:

pages _____, as originally filed/furnished
 pages* _____, as amended (together with any statement) under Article 19
 pages* _____ 1, 3, 4, 6, 9, 12 _____ received by this Authority on 18 February 2005 (18.02.2005)
 pages* _____ received by this Authority on _____

the drawings:

pages _____ 1-11 _____, as originally filed/furnished
 pages* _____ received by this Authority on _____
 pages* _____ received by this Authority on _____

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. The amendments have resulted in the cancellation of:

- the description, pages _____
- the claims, Nos. 2, 5, 7, 8, 10, 11 _____
- the drawings, sheets/figs _____
- the sequence listing (*specify*): _____
- any table(s) related to sequence listing (*specify*): _____

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- the description, pages _____
- the claims, Nos. _____
- the drawings, sheets/figs _____
- the sequence listing (*specify*): _____
- any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP 03/11762

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|---------------------------|-----|
| Novelty (N) | Claims | <u>1, 3, 4, 6, 9, 12</u> | YES |
| | Claims | <u> </u> | NO |
| Inventive step (IS) | Claims | <u> </u> | YES |
| | Claims | <u>1, 3, 4, 6, 9, 12</u> | NO |
| Industrial applicability (IA) | Claims | <u>1, 3, 4, 6, 9, 12</u> | YES |
| | Claims | <u> </u> | NO |

2. Citations and explanations

Document 1: JP 2849554 B2 (Kyodo Denshi System Co., Ltd.),
 20 January 1999, paragraphs 0011 to 0017
 (Family: none)

Document 2: JP 2002-230703 A (Kyodo Denshi System Co.,
 Ltd.), 16 August 2002, paragraphs 0039 to
 0066 (Family: none)

The invention set forth in claim 1 does not involve an inventive step in the light of newly cited document 1. Document 1 sets forth a spin stand for a disk certifier which is provided with a spindle (102) which rotates the disk (103), a head jig (109) which fixes the head (110), and a rotary positioner (107) which turns the head (110) and controls the angle, wherein skew angle is set by the rotary positioner. In the explanation referring to fig. 3, fig. 3 (A) indicates that a disk (103) is mounted, and fig. 3 (C) indicates that after carrying out manual glide testing (confirmation after burnishing), manual read/write testing is carried out on the magnetic head (110) (paragraphs 0011 to 0017). Moreover, it would be easy for a person skilled in the art to conceive of carrying out both the movement of the magnetic head (110) from (A) to (C) in fig. 3, and the setting of the skew angle in testing at fig. 3 (C), using the aforementioned rotary

positioner.

The invention set forth in claim 3 does not involve an inventive step in the light of document 1. In the invention set forth in document 1, it would be easy for a person skilled in the art to conceive of attaching/detaching the magnetic head in the state shown in fig. 3 (A).

The invention set forth in claim 4 does not involve an inventive step in the light of document 1. The wording "restriction of movement or immobilization at the separation position" in claim 4 is understood to mean that the degree of freedom of positioning in the restricted movement or immobilized state is relatively low, but the degree of freedom is merely a matter which a person skilled in the art could set as necessary.

The invention set forth in claim 6 does not involve an inventive step in the light of document 1. The relative positioning of constituent elements is merely a matter which a person skilled in the art could set as necessary.

The invention set forth in claims 9 and 12 does not involve an inventive step in the light of document 1 and document 2 cited in the international search report. Document 2 sets forth a device provided with a spindle motor which rotates a magnetic disk (17), a head clamp (29) which positions a magnetic head (27), a piezo stage (93) which is attached to the head clamp and moves the magnetic head in minute increments, and a skew stage (55) which sets the skew angle of the magnetic head by rotating the head clamp (29) (paragraphs 0039 to 0066). It would be easy for a person skilled in the art to conceive of applying the piezo stage set forth in document 2 in between the head (110) and head jig (109) set forth in

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document 1 in order to enable the magnetic head to be moved in minute increments.

In addition, it is common general technical knowledge that rotation is stabilized by having the center of gravity and center of rotation of a rotating body approach one another, and it would be easy for a person skilled in the art to conceive of disposing a piezo stage in this manner.